

5.0 PARTS LIST

Item	Qty -011	Qty -041	Qty -043	Qty -101	Part Number	Description
	X				D135-751-011	SKIDTUBE INSTALLATION
	(1)	X			D135-751-041	REPLACEMENT SKIDTUBE
			X		D135-751-043	WEARPLATE KIT
				X	D135-751-101	SKIDTUBE EXTENSION KIT
1		1			D3507-041	SKIDTUBE ASSEMBLY
2	4				**BRS8-96/48SZ-M8-W2	CLAMP
3	8				**LN9038-08032	SCREW
4		1			*D2965	CAP
5		1			*D2965-3	CAP
6		2			***AELS-1032-130	INSERT
7		2			***AELS-1032-225	INSERT
8		2			*AN3C5A	BOLT
9		2			*AN960C10L	WASHER
10		2			*AN526C1032-10	SCREW
20A		1	1		*D3508-1	WEARPLATE
20B		1	1		*D3558-1	GASKET
21A		1	1		*D3508-3	WEARPLATE
21B		1	1		*D3558-3	GASKET
22A		1	1		*D3508-5	WEARPLATE
22B		1	1		*D3558-5	GASKET
23A		1	1		*D3508-7	WEARPLATE
23B		1	1		*D3558-7	GASKET
24		38			*AELS-1032-130	INSERT
25	8	30	38		*AN3C4A	BOLT
26	8	30	38		*AN960C10L	WASHER
27	2		2		D3512-1	WEARPLATE
30		1			*AELS-1032-225	INSERT
31		1			*AN3C4A	BOLT
32		1			*AN960C10L	WASHER
40		4			*D3492-041	PLUG ASSEMBLY
41		4			***NAS1611-010	O-RING
42		2			*D3492-047	PLUG ASSEMBLY
43		2			***NAS1611-007	O-RING
44		4			*D3506-1	DOUBLER
45		8			*MS20601AD4W3	RIVET
46		2			*D3506-3	DOUBLER
47		4			*MS20601AD4W3	RIVET
48		4			*D3492-043	PLUG ASSEMBLY
49		4			***NAS1611-013	O-RING
50				1	D3510-041	INSERT ASSEMBLY
51				2	***AELS-1032-130	INSERT
52				6	***AELS-1032-225	INSERT
53				2	***ALS4-428-165	INSERT
54				2	AN4C7A	BOLT
55				2	AN960C416L	WASHER
56				2	AN3C4A	BOLT
57				8	AN3C7A	BOLT
58				10	AN960C10L	WASHER

* PART IS INCLUDED WITH D3507-041 SKIDTUBE ASSEMBLY

** TO BE SUPPLIED BY CUSTOMER, LISTED AS REFERENCE ONLY

*** DENOTES PART IS INCLUDED WITH ASSEMBLY ABOVE

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Revision: C

Date: 07.09.20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

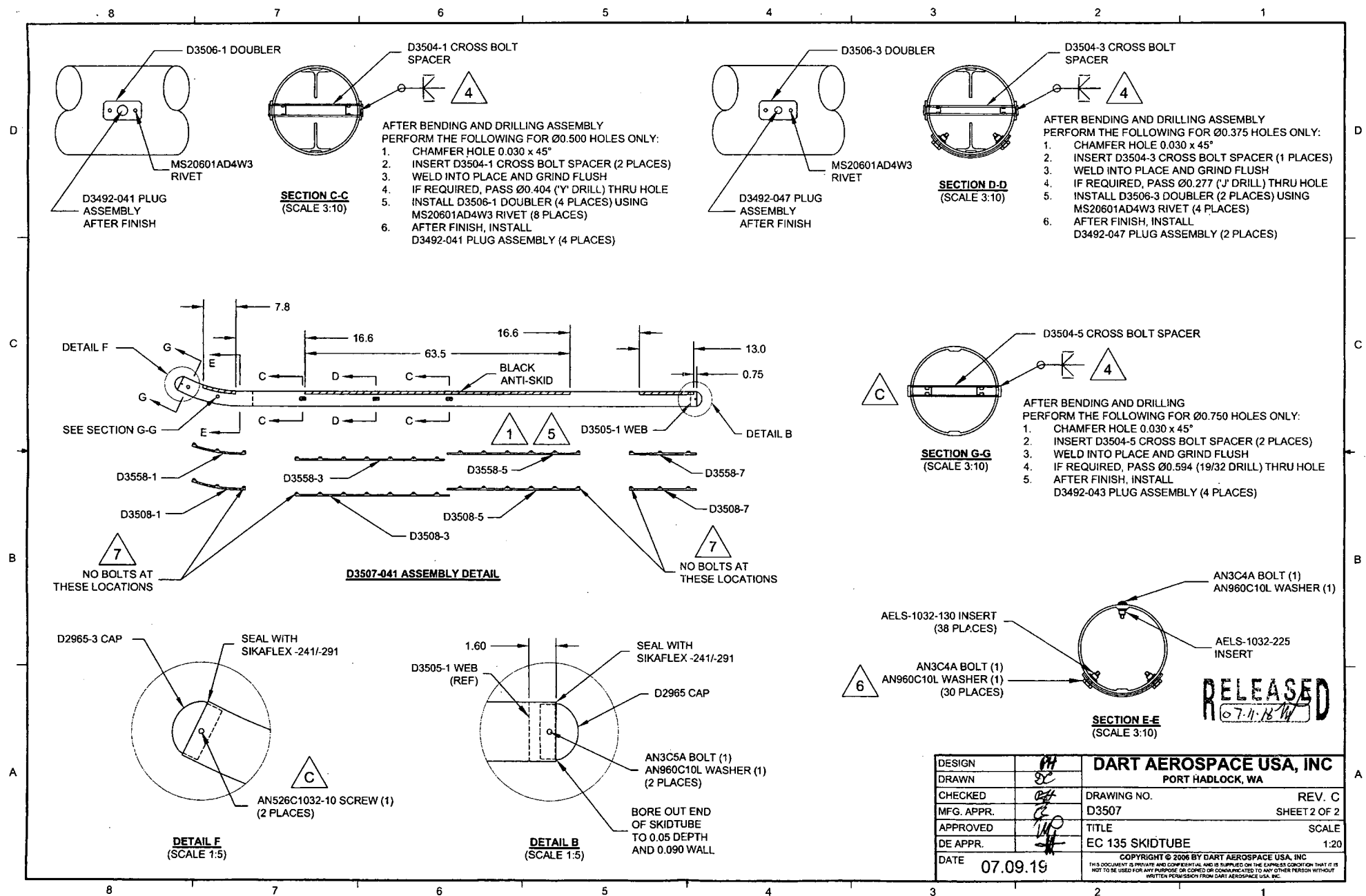
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

u/o 7/304



DESIGN	14	DART AEROSPACE USA, INC	
DRAWN	SC	PORT HADLOCK, WA	
CHECKED	SC	DRAWING NO.	REV. C
MFG. APPR.	SC	D3507	SHEET 2 OF 2
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	EC 135 SKIDTUBE	1:20
DATE	07.09.19	COPYRIGHT © 2006 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
07-11-18

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NOTE: Date & initial all entries

SHOP COPY

RETURN TO

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WITHOUT NOTICE
WORK ORDER

NO. 71304

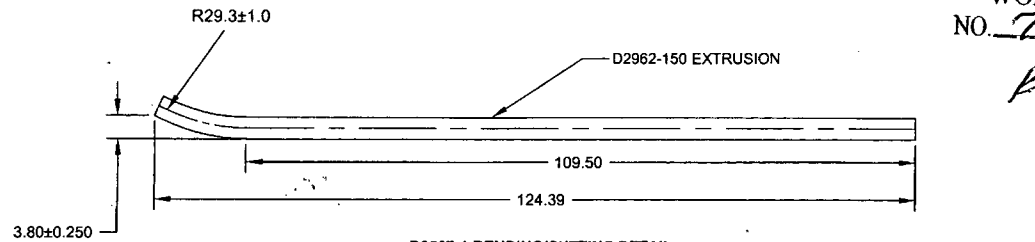
11-06-27

Qty	Part Number	Description
X	D3507-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2965	CAP
1	D2965-3	CAP
4	D3492-041	PLUG ASSEMBLY
4	D3492-043	PLUG ASSEMBLY
2	D3492-047	PLUG ASSEMBLY
2	D3504-1	CROSS BOLT SPACER
1	D3504-3	CROSS BOLT SPACER
2	D3504-5	CROSS BOLT SPACER
1	D3505-1	WEB
4	D3506-1	DOUBLER
2	D3506-3	DOUBLER
1	D3508-1	WEARPLATE
1	D3508-3	WEARPLATE
1	D3508-5	WEARPLATE
1	D3508-7	WEARPLATE
1	D3558-1	GASKET
1	D3558-3	GASKET
1	D3558-5	GASKET
1	D3558-7	GASKET
38	AELS-1032-130	INSERT
1	AELS-1032-225	INSERT
31	AN3C4A	BOLT
2	AN3C5A	BOLT
2	AN526C1032-10	SCREW
33	AN960C10L	WASHER
12	MS20601AD4W3	RIVET

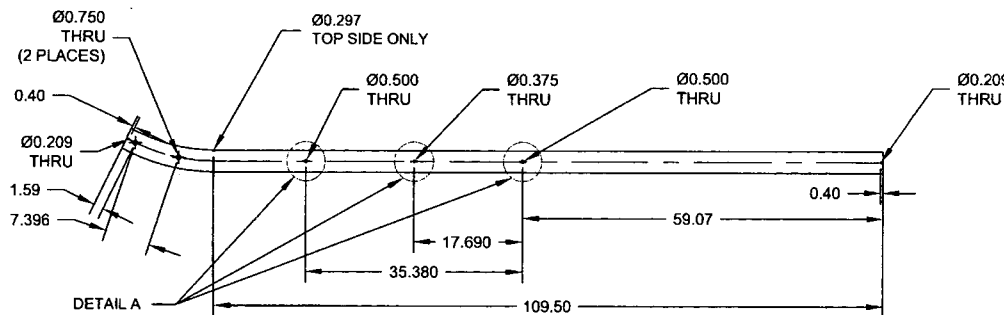
GENERAL NOTES:

- 1) FINISH:
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3505-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4
- 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) DIMENSIONS: INCHES UNLESS OTHERWISE NOTED
- 4) WELDING TO BE DONE PER DART QSI 004
- 5) INSERT D3505-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING
- 6) USE DART DRILL TEMPLATE DT8868 TO LOCATE AND DRILL Ø0.297 HOLES (38 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION C-C (38 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- 7) DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS

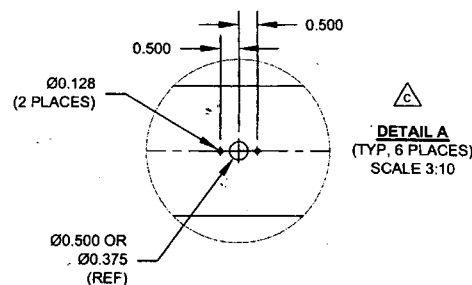
C	ADD D3504-5, FOR SKID GEAR DEFLECTOR; CHANGE FWD CAP BOLT TO AN526C1032-10 SCREW	DC	07.09.19
B	ADD GASKET, CHANGE HARDWARE MATL	PH	06.11.01
A	NEW ISSUE	PH	06.04.21
REV.#	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	JIC		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH	REV. C	
DATE	07.09.19	SHEET 1 OF 2	
		SCALE	
		EC 135 SKIDTUBE	
		NTS	
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D3507-1 BENDING/CUTTING DETAIL



D3507-1 DRILLING DETAIL



DETAIL A
(TYP, 6 PLACES)
SCALE 3:10

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Page 8

Work Order ID: 71304

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

280

Each

2,178.000

8

8



BOLT

Location

Loc Qty

Loc Code

ST350

2178

117313

2

117688

776

117795

500

117872

22

118012

500

118112

378

AN960C10L

NAS1149C0332

Purchased

No

280

Each

0.0000

8

8



washer

D3512-1

Manufactured

No

280

Each

5.0000

2

2



Wearplate

Location

Loc Qty

Loc Code

ST500

5

70863

5

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 7

Work Order ID: 71304

Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00



Required Qty: 1.00

D3558-7	Manufactured	No	260	Each	14.0000	1	1
							<u>11/07/25</u>
Gasket							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP014	14	
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<u>67162</u>	14	
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NAS1611-007	Purchased	No	260	Each	290.0000	2	2
							<u>11/07/25</u>
O-RING							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP-A	290	
------	-----	--

<u>103697</u>	290	
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NAS1611-010	Purchased	No	260	Each	198.0000	4	4
							<u>11/02/25</u>
O-RING							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP	96	
----	----	--



117460	16	
--------	----	--

118077	80	
--------	----	--

FP-A	102	
------	-----	--

<u>110915</u>	91	
---------------	----	--

115589	11	
--------	----	--

NAS1611-013	Purchased	No	260	Each	176.0000	4	4
							<u>11/07/25</u>
O-RING							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
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FP	171	
----	-----	--

117291	31	
--------	----	--

<u>117887</u>	140	
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FP-A	5	
------	---	--

116582	5	
--------	---	--

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W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 71304

Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011



Start Qty: 1.00

Required Qty: 1.00

D3508-5	Manufactured	No	260	Each	4.0000	1	1
							<u>11/07/25</u>
Wearplate							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP021	4	
<u>67160</u>	4	<u>X1</u>

D3508-7	Manufactured	No	260	Each	9.0000	1	1
							<u>11/07/25</u>
Wearplate							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP021	9	
<u>67159</u>	3	<u>X1</u>
<u>67739</u>	6	

D3558-1	Manufactured	No	260	Each	10.0000	1	1
							<u>11/07/25</u>
Gasket							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP014	10	
<u>50925</u>	10	<u>X1</u>

D3558-3	Manufactured	No	260	Each	4.0000	1	1
							<u>(X1) 11/07/25</u>
Gasket							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP014	4	
<u>67486</u>	4	

D3558-5	Manufactured	No	260	Each	12.0000	1	1
							<u>11/07/25</u>
Gasket							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

FP014	12	
<u>67485</u>	12	<u>X1</u>

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Monday, June 27, 2011 3:43:04 PM

Work Order ID: 71304

Parent Item: D135-751-011



Parent Item Name: Skidtube Installation

Start Date: 6/27/2011



Required Date: 7/5/2011

Start Qty: 1.00



Required Qty: 1.00



D3492-1 Manufactured No 260 Each 132.0000 4 4
  ju u107125
 Plug

Location	Loc Qty	Loc Code
FP	132	
69531	8	
<u>69819</u>	52	<u>xl</u>
70689	72	



D3492-3 Manufactured No 260 Each 124.0000 4 4
  ju u107125
 Plug

Location	Loc Qty	Loc Code
FP	124	
69822	44	
<u>70692</u>	80	<u>xl</u>

D3492-7 Manufactured No 260 Each 0.0000 2 2
 * D3492-047 328961  (x2) ju u107125
 Plug

D3508-1 Manufactured No 260 Each 10.0000 1 1
  ju u107125
 Wearplate

Location	Loc Qty	Loc Code
FP016	10	
<u>61020</u>	10	<u>xl</u>

D3508-3 Manufactured No 260 Each 1.0000 1 1
  ju u107125
 Wearplate

Location	Loc Qty	Loc Code
FP021	1	
38527	1	<u>371210</u> <u>xl</u>

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Work Order ID: 71304

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

AN526C1032R10 Purchased No

260 Each 241.0000 2 2



Screw



Handwritten: 1107125

Location

Loc Qty

Loc Code

FP-B

105

108062

105

ST327

100

x2

114494

100

ST328

36

110049

36

AN960C10L NAS1149C0332 Purchased No

260 Each 0.0000 33 33



washer

1118306



(x33)

Handwritten: 1107125

D2965 Manufactured No

260 Each 23.0000 1 1



Cap, 105 Skidtube



Handwritten: 1107125

Location

Loc Qty

Loc Code

FP006

23

52057

23

x1

D2965-3 Manufactured No

260 Each 1.0000 1 1



Cap



Handwritten: 1107125

Location

Loc Qty

Loc Code

FP005

1

50560

1

1371300

x1

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Work Order ID: 71304

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-225

Purchased

No

260

Each

690.0000

1

1



Insert



Handwritten: 1107125

Location

Loc Qty

Loc Code

ST282

690

110768

213

117717

477

Handwritten: x1

AN3C4A

Purchased

No

260

Each

2,178.000

31

31



BOLT



Handwritten: 1107125

Location

Loc Qty

Loc Code

ST350

2178

117313

2

117688

776

117795

500

117872

22

118012

500

118112

378

Handwritten: x31

AN3C5A

Purchased

No

260

Each

1,389.000

2

2



Bolt



Handwritten: 1107125

Location

Loc Qty

Loc Code

FP-A

7

115835

7

ST350

1382

116419

28

116549

54

117343

500

117764

300

117872

500

Handwritten: x2

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 2

Work Order ID: 71304

Parent Item: D135-751-011

Parent Item Name: Skidtube Installation

Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

D3504-5 Manufactured No

170 Each

4.0000

2

2



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG001

4

53744

4

D3505-1 Manufactured No

170 Each

0.0000

1

1



Web

D3506-1

Manufactured No

190 Each

39.0000

4

4



Doubler

Location

Loc Qty

Loc Code

ST063

39

51789

39

D3506-3 Manufactured No

190 Each

83.0000

2

2



Doubler

Location

Loc Qty

Loc Code

ST063

83

51790

83

MS20601-AD4W3 Purchased No

190 Each

2,822.000

12

12



Rivet

Location

Loc Qty

Loc Code

ST321

2822

114538

2822

BR 11/07/21
B 71226 2

Sh
11/07/20

BB 11/07/22
BB 11/07/22

BB 11/07/22

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W/O:		WORK ORDER CHANGES					
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Parent Item: D135-751-011

Parent Item Name: Skidtube Installation



Start Date: 6/27/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 06-06-21 New Issue JLM
 IPP Rev:B 06-12-18 As per Rev B JLM
 IPP Rev:C 07-12-11 ECN 1036 as per revB DD
 IPP Rev D 08.11.04 Added DT9431 to sequence 5 EC verified DD
 IPP Rev E 10.02.22 per pAR 09-043 EC verified by: DD IPP Rev:F
 10.06.09 remove seq110 DD verf:EC IPP Rev G 10.09.17
 added D3507-1-bent EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-130 		Purchased	No				Each	1,209.000		38			
Insert													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST282				1209					
				117717				1209		1118386		x38	
D3507-1-BENT 		Manufactured	No			120	Each	0.0000	1	1			
Skidtube Assembly EC135													
D3504-1 		Manufactured	No			170	Each	2.0000	2	2			
Crossbolt Spacer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				2					
				53742				2					
D3504-3 		Manufactured	No			170	Each	24.0000	1	1			
Crossbolt Spacer													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG001				24					
				31232				4					
				53743				20					

8/11/07/13
B71200 x1

8/11/07/21
B71130 -2

8/11/07/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
300		0.00							
	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D135-751-011								
	Location: _____								
	PPP Rev: <u>B</u>								
310		0.00							
	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

P 4/7/25 @

11/7/29

11-67-28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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270

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

11 07 26 (1)

280

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

11/3/27 (1)

290

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

11 07 27 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

260

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1 d Jul 6/07/25

1- Install Wearplate & Ground Wire inserts as per Dwg D3507.

1- Inspect for Foreign objects

2- Install Fwd & Aft caps as per Dwg D3507 And Detail "A" & "B"

A/R 241 Sika Flex Batch: 11117516
Exp Date: 15/01

3- Install Wearplates as per Dwg D3507,

Note: Install (1) Bolt and (1) washer on Ground Wire insert on top of tube
Do not Install Scews where indicated on Dwg (Note #6)

A/R 241 Sika Flex Batch: 11117516
Exp Date: 15/01

4- assemble o-ring to plug as per dwg D3492 and apply o-ring lube

A/R 55-o-ring lube batch: 11114189

5- Wing Walk as per Dwg D3507 and QSI 005 4.4

Batch: 11117863

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

1 0 11/10/25

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

1117745.

Memo

0.00

Powder Coating

START TIME: 10:10
OVEN TEMPERATURE: 350°
FINISH TIME: 10:40

1 0 11-7-25

230

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 11/7/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Page 5

Item ID: D135-751-011

Accept

Revision ID:

Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00

Required Date: 7/5/2011 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180	QC10- Inspect visual per QSI004- ground welds	0.00							
-----	---	------	--	--	--	--	--	--	--



QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

11-07-21

190	Skidtubes	0.00							
-----	-----------	------	--	--	--	--	--	--	--



Skidtubes	Memo	0.00							
-----------	------	------	--	--	--	--	--	--	--

Skidtubes	1-Rivet D3506-1/-3 as per Dwg D3507.								
-----------	--------------------------------------	--	--	--	--	--	--	--	--

11/07/22

200	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--



QC	Memo	0.00							
----	------	------	--	--	--	--	--	--	--

Quality Control

11 07 22

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

170

0.00



Skidtubes

0.00

Skidtubes

Skidtubes

Memo

1-Open X-Bolt holes to .375"(2Places) & .500"(2Places) as per Dwg D3507.
and Detail "F"

2-Counter Sink X-BOLT holes as per Dwg D3507

3-Deburr and blow out chips from inside of tube.

4-Bond web as per Dwg D3507 & QSI 015

A/R 241 Sike Flex Batch: 112516
Exp Date: 12/01/15
start time: 11:15am
end time: _____

OK. 11/07/20.

BB 11/07/20

5-Weld x-bolt (D3504-1/-3) spacers as per Dwg D3507 and Detail C-C & D-D.

A/R AL ROD Batch: mm2860

BB 11/07/21

6-Grind welds flush

7-Drill Rivet Holes as per Dwg D3507 Using Dt8871A&B

BB 11/07/21

8-Deburr Rivet holes.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Page 3

Item ID: D135-751-011

Accept

Revision ID:

Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00

Required Date: 7/5/2011 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

150

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control



Setup Start



Stop



Run Start



Stop



8 ulg/19



B 11/07/19

1 8 8/11/06/20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304

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Page 2

Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	1-Cut Aft end as per dwg D3507								
	2-Deburr ends								
	3-Drill Aft & Fwd Cap holes using DT8678 & DT8901								
	4-Locate DT8870 & Drill Ground wire hole on top of Tube.								
	6-Locate DT8870 with #30 cleco in Ground wire hole, then Pilot Drill all X-Bolt holes using #30" drill. ****DO NOT OPEN AFT CAP HOLES****								
	7-Open crossbolt holes to 0.3125" (3 per side). Drill pilot holes for wearplates using Dt8868, Use DT8892 FOR REAR WEARPLATE HOLES.								
	8-Open six rear wearplate holes using DT8892. Open holes to: 0.297"								
	9-Open Aft & Fwd Cap holes using .208" drill.								
	10-Bore out aft end of tube as per Dwg D3507 & Detail "B".								
	11-Open ground wire hole .297" section E-E								
	12- Section G-G holes must be laid out manually, open to #30.								
	13-Deburr holes.								

BE 11/07/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 71304



Page 1

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Item ID: D135-751-011

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube Installation

Start Date: 6/27/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date: 11-06-27

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3492

C

D3507

Rev C

100

0.00



DOCUMENT CONTROL

DC

0.00

Memo

Document Control

Photocopy bluefile & type labels per PPP D135-751-011 CHG001

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Hj for BG 11-7-27

B71304